

333.715
C1531

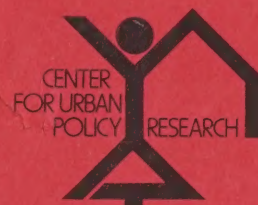
TITLE *Integrating Economic and
Environmental Planning:
The Regional Perspective*

OPEN SHELF

AUTHOR(S) SCOTT CAMPBELL

WORKING PAPER NO. 43

NOTICE: Return or renew all Library Materials! The Minimum Fee for





OAK ST. HDSE

UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN



TITLE

*Integrating Economic and
Environmental Planning:
The Regional Perspective*

OPEN SHELF

AUTHOR(S)

SCOTT CAMPBELL

WORKING PAPER NO. 43

NOTICE: Return or renew all Library Materials! The Minimum Fee for each Lost Book is \$50.00.

The person charging this material is responsible for its return to the library from which it was withdrawn on or before the **Latest Date** stamped below.

Theft, mutilation, and underlining of books are reasons for disciplinary action and may result in dismissal from the University.
To renew call Telephone Center, 333-8400

ASSISTANT UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

DEPARTMENT

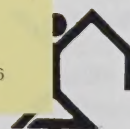
DEC 07 2010

This paper was
Planning and A
Congress, Oxfor

hools of
national

CENTER FOR URBAN
RUTGERS—THE
P.O. Box 489
PISCATAWAY, NEW JERSEY 08855-0489

L161—O-1096





OAK ST. HDSF

UNIVERSITY OF
ILLINOIS LIBRARY
AT URBANA-CHAMPAIGN



TITLE

AUTHOR(S)

WORKING PAPER

© 1992

SCOTT CAMPBELL

ASSISTANT PROFESSOR AND ACTING DIRECTOR, 1991-92, PRIE

PROJECT ON REGIONAL AND INDUSTRIAL ECONOMICS

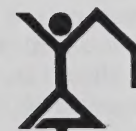
DEPARTMENT OF URBAN PLANNING AND POLICY DEVELOPMENT


RUTGERS—THE STATE UNIVERSITY OF NEW JERSEY

NEW BRUNSWICK, NEW JERSEY 08903

This paper was presented at the Joint Association of Collegiate Schools of Planning and Association of European Schools of Planning International Congress, Oxford, England, July 1991.

CENTER FOR URBAN POLICY RESEARCH
RUTGERS—THE STATE UNIVERSITY
P.O. Box 489
PISCATAWAY, NEW JERSEY 08855-0489





Digitized by the Internet Archive
in 2023 with funding from
University of Illinois Urbana-Champaign Alternates

<https://archive.org/details/integratingecono00camp>

"Integrating Economic and Environmental Planning: the Regional Perspective"

"Mankind has cleared the jungle and replaced it by a labyrinth."
(Benton MacKaye)¹

Growing concerns about acid rain, the greenhouse effect, solid waste and declining water quality have reintroduced the environment into the center of the public policy arena.² Recent revelations about environmental degradation in Eastern Europe have joined long-standing ecological fears in both the first and third worlds to create a truly global crisis. Unfortunately, these issues are too rarely integrated with a second public policy concern: the restructuring of the national and international economies. When these two paradigms do collide, the exchange is often brief and dissonant: the environmentalists accuse the economists of being positivistic, myopic smokestack-chasers, while the economists reply with accusations of naïve, utopian thinking without any understanding of how "the economy really works". The resulting lack of cooperation often leads to planning results that please neither group.

In this paper I explore ways in which the environment and the economy can be better integrated. Ideally, these two traditions should be integrated at three levels: conceptually, substantively, and pedagogically. I will focus on the conceptual level today, and will leave the other two levels to future discussion and research.³

I also ask the question: Is planning well-suited to integrate these two interests, especially the "regionalist" approach to planning? Can regional planning create a common language between these two contentious forces? To answer these questions, I review several regional planning traditions from the past — including the Benton MacKaye's Regional Planning Association of America, Harvey Perloff's New Deal regional development, and Walter Isard's postwar regional science — to see how successful they were in achieving this integration. Finally, I will offer some ideas about how regional planning theory can better overcome the environmental-economic gap in the future.

¹MacKaye, 1968: 5.

²The author would like to thank Ann Markusen, Donald Krueckeberg, Irwin Remson, and Diane Massell for their ideas and conversations. I am also grateful to the Center for Urban Policy Research at Rutgers University for a Visiting Scholar's position.

³ This conceptual conflict manifests itself in substantive planning practice, such as growth management and open space preservation, water and timber resource management, coastal zone management, and land use and transportation policy. At the pedagogical level, American planning programs generally treat economics and environmentalism as two separate concentrations, and students in these two areas are not usually in the same academic or social circles. Even within the regional planning concentration, economic development and environmental resource management are treated as two distinctly separate areas.

1. *The Conceptual Level*

Let us first examine the conceptual level. How do economists and environmentalists use differing concepts of the world? Clearly, both fields contain an enormous diversity of opinion; yet their pure forms seem to lie at opposite ends of the intellectual spectrum. These different world views, in turn, lead to diverging methodologies, assumptions, models, and ultimately to unique — and conflicting — solutions.

The ideal type economists, those within the traditional neoclassical model, use a marginal, mechanistic model. The unit of analysis is the individual or the firm; transactions and values are measured in money. Their view of a system in equilibrium is a balance of supply and demand in the context of a steadily growing economy (like a bicyclist or shark, such an economy must be in forward motion to survive). The future, though periodically interrupted by temporary recessions, is bright and promises steady expansion of economic activity. The needs of individuals are best served through enlightened self-interest as expressed through the marketplace. Natural resources have value only to the extent that they can be converted to present or future monetary payback, generating factors of production. The aesthetic value of nature is thereby translated as a marketable product for the tourist or real estate industries. The amount of natural resources is also flexible; ever-improving technologies of extraction and processing mean that the supply and value of resources are determined by a changing society, not just their inherent natural quality.

The ideal type environmentalists, at least those worthy of raising the hackles of economists, have a quite different world view. They use a comprehensive, ecological model. Their unit of analysis is much more varied than that of the economist, including the individual organism, the species, the ecological region, etc. A system in equilibrium is one in steady-state, kept within the carrying capacity of the ecosystem and the rate of resource reproduction. Violations of this balance lead either to painful adjustments, or worse, cataclysmic vicious circles; recognition of the latter often leads to the apocalyptic world view characteristic of some environmentalists. For them, natural resources have an intrinsic value which cannot easily be translated to monetary terms. Whereas an economist sees the value of resource *use*, the environmentalist sees the value of its mere *existence*, undisturbed, in its virgin state.⁴ Because the environmentalist sees this value in nature *in itself* — yet nature cannot speak for itself (especially not in the marketplace) — there is

⁴There is of course, a wide spectrum of opinion here. From one extreme to the other, there is: resources have only value in their present consumption (immediate self-interest); value in their present and discounted future consumption (medium-term self-interest); consumption value for present and future generations (a more open-ended and social interest); value in their permanent conservation.

no "environmental self-interest" as there is "economic self-interest." Hence environmentalists feel compelled to "speak" for the trees and the rest of nature.⁵

Thus the economist and the environmentalist — at least in their pure manifestations — have conflicting definitions of basic concepts, such as their understanding of equilibrium, growth, social trade-offs, equity, and sustainability.⁶ This leads not only to conflicting positions on public policy matters, but often even the inability to find a common definition of the problem and its context.

This is not to say that the two groups are separate and without contact. There have been numerous attempts to integrate these two. Yet quite often these "integrations" are actually the forced compliance of one paradigm to fit the methods and assumptions of the other. For example, traditional environmental economics bends the environmental world to fit into the economic framework by assigning market values to all ecological factors, as is seen in economist Robert Solow's discussion of natural resources:

"A pool of oil or vein of iron or deposit of copper in the ground is a capital asset to society and to its owner (in the kind of society in which such things have private owners) much like a printing press or a building or any other reproducible capital asset. The only difference is that natural resource is not reproducible, so the size of the existing stock can never increase through time. It can only decrease (or, if none is mined for a while, stay the same). ... A resource deposit draws its market value, ultimately, from the prospect of extraction and sale."⁷

This approach may be easier than the reverse (having economics fit the world of environmentalists), for the language and coding of environmentalism is not nearly as explicit and mechanized as that of economics. Yet being methodologically operational is not the same as being socially equitable or desirable. By speaking the language of economics, this approach recognizes only the economic value of the environment to the neglect of its nonmarket qualities. True, a sufficiently low discount rate at least allows an economic model to justify slow, long-term consumption of a natural resource; but it still fails to recognize value in the conservation (i.e., the existence rather than consumption) of the resource.

At the other extreme lies much of environmental thinking, which is appealing in its purity and holistic vision, yet frustratingly ineffective in shaping urban and industrial policy. Whether or not justified, too often the environmentalist is marginalized as obstructive, anti-modern and unwilling to accept the "realities" of industrial society.

As a third alternative, the inherently interdisciplinary field of urban planning offers a potentially more balanced integration. The history of planning, after all, is one of an alternating — and often

⁵The skeptic would say that the environmentalist is actually exercising great self-interest, while using the self-appointed role of altruistic "nature's advocate" as a cynical facade.

⁶Even Thomas Robert Malthus, in articulating the central dilemma of an exponentially growing population and arithmetically expanding food resources 200 years ago, implicitly recognized the conflict between economic demand and the natural environment.

⁷Solow, 1977: 356.

ambiguous — alliance to both the built and the natural environments. Though it certainly does not occupy a neutral position outside the fray of this conflict, it does have a greater tendency towards compromise and synthesis than either the entrenched economic or ecologic camps. In the following sections, I will examine whether planning — and regional planning in particular — can overcome its own internal schism between economic development and environmental policy and thereby serve as a bridge between these two camps for other disciplines, meeting the interests of the economy and the environment halfway.

I have prefaced my discussion of regional planning with the economist-environmentalist spectrum because this debate seems quite central to the field. I see much of the history of regional planning as a pushing and pulling between these two ideological poles.

2. *The Regional Level*

Regional planning has traditionally been advocated in the United States for several reasons: to overcome interregional inequality (e.g., northern vs. southern states); to preserve regional societies and cultures; to achieve efficient scale economies by coordinating inter-municipality investment; and to manage regional resources. At times the region is contrasted to the city (e.g., for central city-suburban equity), the metropolis (Lewis Mumford's fight against anti-rural metropolitan sprawl), and the nation (Howard Odum's struggle against a northern development path for the American South). Regional planning in America thus represents not only a specific geographic scale of planning, but also a broader tradition of comprehensive planning and a regionalist view of society.

Why do I see the regional level as the best for integrated economic-ecological planning? Both its geographic scale and its interdisciplinary approach offer the best ground for this integration.

On the economic side, the region describes the labor market, the housing market, and often the source of water, energy and other natural resources. On the environmental side, the region describes the watershed, the air quality basin, the land and mineral resources. The city level is too small to contain all the complexities, and the nation-state is often too large and awkward a political entity to represent the subtle complexities of economic and environmental systems. Other planning issues, such as urban design, housing, and historic preservation, are more effective at the local level, so that their relative absence at the regional level allows for the ecologic-economic forces to be expressed more directly.

Finally, the regional approach acknowledges the issues of inequity that are so central to the ecologic/economic battle; the distribution and control of resources goes to the heart of regional policy.

There are, of course, limits to the regional approach. The scales of economic and environmental processes are neither always the same nor always regional. Bioregions and social regions may not intersect. Alvin Hansen and Harvey Perloff recognized this fifty years ago:

"Experience indicates that the regional boundary should not be rigidified. Many problems of resource management and of social and economic planning cut across watershed boundaries and should be treated accordingly. ... It is important, therefore that the sphere of authority of the developmental agency be elastic."⁸

Even if the regional scale is appropriate, conflicts may still arise. But that is unavoidable: conflict is inherent to the interaction of the environment and the economy — regardless of the scale. Perhaps more importantly, regional planning requires a level of coordination, i.e., of planning authority, that is usually not attained — at least in the United States. To help the environment requires regulation; to help the economy requires promotion, taxation, etc. But to link the environment and the economy together requires much more: comprehensive planning at a scale which we are not used to, or necessarily ready to grant to the government planners. So, there is something about this integration itself which raises the level of planning needed above what either of the two requires alone. This intersection of public and private creates a complex — and to many people a threatening — sense of what land and resources are, and shakes up traditional visions of the role of planning.⁹

3. *Past Regional Planning Traditions*

I will use three different phases of regional planning and regional theory to illustrate how interactions between the environment and the economy have changed over the course of the twentieth century. The first will be that of the Regional Planning Association of America during the 1920s. The second will be New Deal-Era regional planning, including comprehensive river basin development as exemplified by the Tennessee Valley Authority. The third will be post-war regional science, especially that of the leading figure of Walter Isard. I will use these three periods as simplified landmarks in the development of regional theory, and see how they point to the future. As such, these brief descriptions are not full histories of each period, but rather extracts to address the following conceptual questions:

⁸Hansen and Perloff, 1942: 29.

⁹With the exception of New Deal and wartime planning, we have generally shied away from comprehensive regional management in favor of single-resource management districts (e.g., water, power, transportation, ports). Somehow the centralized control of these resources is more threatening than the separate control of each individual resource, perhaps because the former offers a more explicit opportunity for government to comprehensively plan and redistribute resources.

- How is the environment defined? Is its identity and value simply to serve society, or does it also have an intrinsic value outside of humanity?
- How is the environment-economy relationship defined (as confrontation, assimilation or harmony)?
- Are the two interests equal, or does one have the upper hand?
- What can be the bridge between the two? Through economic value, political compromise, a urban-rural balance?
- How is the region defined (biophysical, economic or political)? How does the regional definition shape and reflect the nature of the environment?
- What is their historical perspective on urbanization and industrialization?

We will see that the RPAA viewed the link between the economy and the environment as a holistic, organic, balanced, almost spiritual one. The New Deal regional planners took a more pragmatic view, and saw the link as one of multi-use resource conservation, use and management with the ultimate goal of economic recovery and growth. The regional scientists took a cool, functional view, seeing the environment as just another factor in their systems approach to managing the space-economy in a virtual fetish of rational optimization.

Idealists of the 1920s: the Regional Planning Association of America

The Regional Planning Association of America was a small but prominent group of planners, architects and social critics who informally met in New York during the 1920s.¹⁰ It included Lewis Mumford, conservationist Benton MacKaye, housing advocate Catherine Bauer, and the labor union specialist Stuart Chase. Clarence Stein and Henry Wright, who built several new towns inspired by Ebenezer Howard's Garden Cities, were also members.

At the heart of the group was the belief that metropolitan sprawl was destructive, and only regional planning could restore a balance between city and countryside and act as a counterweight to the destructive forces of the economy that were breaking down indigenous regional ties. This notion of regional balance reflected an ecological world view: such a balance was not just between city and country, but by extension between the built and the natural, between the urban and rural, between social and physical. As a result, their critique of metropolitan planning as serving the city over the countryside was not just against the inequality of city vs. country residents, but also the inequality of industrial urbanization vs. nature. Regional planning itself was thus the bridge between the economic and the ecologic, and parity between the two would be achieved through a spatial balance of the two.

¹⁰see Sussman, 1976.

The RPAA was not anti-urban and anti-modern. Nor did they start with the concept of economic growth as a central goal; harmony, balance, quality of life were more central. New technology would allow industry to serve humanity and maintain a balance with nature. So, modern technology — plus decentralizing regional planning — could overcome the nature-industry conflict that characterized the early part of the industrial revolution. This hope reflected Ebenezer Howard's belief that the marriage of town and country was the ideal alternative to the filthy industrial city, and a means to transcend both industrial capitalism and socialism.

In the end, however, if the RPAA presented such a wonderfully appealing world view, why was it not accepted by more people? This was in part because the group never attempted to expand their ranks beyond a small circle. In addition, though their ideas were aesthetically and conceptually seductive, they did not carry much clout in the rough world of industry and politics. Finally, many of their members moved on into more pragmatic positions in New Deal planning. This transition is the subject of the next section.

The Great Depression and Wartime: regional planning based in Washington

The shift from the RPAA to New Deal regional planning reflects in part an ideological change; but is also simply the shift from the idealism of a small group of visionaries during an economic boom to the implementation of regional planning in the contested and compromise-ridden political arena of the Great Depression. In this context we can better understand the shift from a vision of harmonious regional balance to a more pragmatic and forceful use of regional resource development for economic expansion and recovery.

Amidst the National Resources Planning Board and its various incarnations (1933-43) and the Tennessee Valley Authority (1933-), one of the central planning ideologies was comprehensive river basin development.¹¹ Though the TVA was the only proposed valley authority out of eleven to be realized, the more general notion of regional planning through resource development played a very powerful role.¹² In 1942 Alvin Hansen and Harvey Perloff summarized this role of planning in *Regional Resource Development*, a thin but influential pamphlet for the National Planning Association. In it they argued that comprehensive regional planning can stimulate private enterprise, not only overcoming economic waste, but also paving the way for postwar economic

¹¹Though terminated by an act of an increasingly conservative Congress in 1943, one postwar incarnation of the NRPB can be seen in the private Resources for the Future (RFF). Charles W. Elliot, 2nd, the NRPB's executive officer, from 1933 through 1943, the entire length of the Board's existence, was asked in the early 1950s by Paul Hoffman, the first head of the Ford Foundation, to be the director of Resources Programs, which later led to the formation of Resources for the Future. (see conversation with Charles W. Elliot, 2nd, in Krueckeberg, 1983: 356).

¹²Friedmann and Weaver, 1979: 76.

vitality. Heavily based on the TVA experience, they argued that "the river valley ... should be, with the exception of the Atlantic Coast regions, the developmental area."¹³

The utilitarian, economic development orientation of their proposal marked a strong departure from the holistic, conservation-minded regional vision of the RPAA. This may reflect both the practical approach of planners during an economic depression, and the attempt to make comprehensive regional planning more palatable to otherwise skeptical and anti-socialistic politicians.

Hansen and Perloff heavily stressed the role of conservation, not to preserve nature in the tradition of Emerson, John Muir or Benton MacKaye, but rather to protect and maintain resources for the economy. Flood prevention, soil conservation and hydroelectric power were the central tools. "We must aim at *conservation for use* so that resources may always yield to the utmost," they stated. "We must conserve our legacies for this and future generations."¹⁴

This was not the rhetoric of the innate value of nature, of appreciating the environment in its natural state. Yet this resource exploitation was neither for the rich nor for just for immediate consumption; instead, it reflected an ideology of resources for the masses today and tomorrow. Indeed, the nation had so abused its soils and other natural resources that even this type of coordinated resource exploitation was arguably much better than the chaotic abuse that had led to the Dust Bowl.

This was also not the regionalist ideology of the RPAA or Howard Odum's southern regionalists, in which each region had its unique developmental role and identity. Instead, regional planning was seen as a way to serve larger national interests. The Second World War subsumed regional inequalities under the larger national war effort. With the war came a rising nationalism, and regional autonomy was no longer a workable political rhetoric. In the face of full production and national mobilization, proponents of balanced rural-urban regional development didn't stand a chance. The nation shifted its attention from rural development to urban defense centers in the name of military expediency.¹⁵

The history of the Tennessee Valley Authority reflects this changing role of river basin development. Initially established as a comprehensive regional planning effort that received enthusiastic support from RPAA members, the TVA's role was eventually narrowed to that of a utility, stripped of its more sweeping social planning roles. For Rexford Tugwell, "from 1936 on, the TVA should have been called the Tennessee Valley Power Production and Flood Control

¹³Hansen and Perloff, 1942: 2.

¹⁴Hansen and Perloff, 1942: 12.

¹⁵see Campbell, 1991.

Corporation.”¹⁶ The later establishment of a national atomic weapons center in Oak Ridge, Tennessee to take advantage of TVA power — like the development of the Hanford atomic center to use Columbia River basin power — symbolized this shift in regional development thinking from the early 1930s to the 1940s.

We thus see that the comprehensive nature of river basin development allows, in principle, for both economic and environmental issues to be dealt with in the same plan. Yet this does not insure that the conflict between the two will be resolved equitably; just that the conflict is more likely to be addressed in the same plan and political process. In the TVA case, the early days promised this comprehensive economic-ecologic planning; but by about 1936, the economic side won out, and the ecologic side was neglected. The TVA had thus lost its bioregional orientation towards regional planning, and had become an agency promoting metropolitan-industrial growth.¹⁷

From Regionalism to Regional Science: the Postwar Transformation of Regional Thinking (or: Cold War, Cold Science)

If regionalism was transformed from the holistic idealism of the 1920s RPAA to the progressive resource extraction of the 1930s TVA, it seemed to vanish altogether after the end of the Second World War. Private sector expansion serving pent-up consumer demand, new international trade and national homogenization of markets and living standards were the driving forces. Regional planning was seen as anachronistic, or worse, socialistic.

Regional theory was changing as well. The tradition of rich description of regional characteristics and physical geography was giving way to a new science of spatial analysis. The decline of regional planning authority freed the field from its political constraints, giving a false technocratic sense that regions were now outside politics. As a result, the "best" regional development approach was no longer what was socio-ecologically balanced (RPAA), or what was feasible in the political economy (TVA). Instead, this political impotence allowed regional scientists to pursue what they perceived as objectively optimal solutions. Borrowing heavily from neoclassical economics, systems analysis and other quantitative analytical fields that were surging in the Cold War (Cold Science) era, regionalism was transformed into regional science. In this abstract imagined world, the topographic and cultural idiosyncrasies of regions were no longer seen as enriching our understanding, but rather as annoying imperfections on the smooth, featureless plane of the ideal space-economy. The region was reduced to a two-dimensional game

¹⁶quoted in Friedmann and Weaver, 1979: 77.

¹⁷One cannot, however, criticize the TVA for neglecting anti-metropolitan sprawl ideology in comprehensive river basin development, for the central problem within the region was not unbalanced development, but rather underdevelopment.

board with resource factors of production. The goal of this game was to optimize the efficiency of spatial interactions.¹⁸

Walter Isard, the dean of regional science in the United States, addressed the relationship between society and nature in 1972 when he coauthored *Ecologic-Economic Analysis for Regional Development*. Though he saw this book as a great detour from his other, more technical works and one that would raise much controversy, it still was in the same analytical tradition. He is even farther away from the RPAA's vision of the innate value of resources than the TVA, and stresses the socially-defined value of resources:

"Natural resources may be defined as those natural conditions and raw materials which man uses to meet his needs and improve his net welfare. the supply of natural resources is not a fixed quantity, but rather a supply which becomes greater and more varied with every scientific and technological advance by man. Because the type and supply of natural resources are a function of man's ability to develop them, alternative natural resource development policies will inevitably exist, with some alternatives being more desirable than others." ¹⁹

He used three techniques to bridge the economic and the ecologic: comparative cost analysis, input-output, and gravity models. He translates several regional science techniques to the natural world, such as an input-output table for flounder ("Winter Flounder Production Linkage Submatrix," Isard, 1972: 57), or a classification system of nature based on the Standard Industrial Classification system ("The Economic-Ecologic Commodity Classification System," *ibid*, p. 63).²⁰ For input-output, industrial linkages become economic interactions and symbiotic relationships. Industrial forward and backward linkages are translated into prey and predator in nature's food chain.

Isard achieves his integration of the ecologic and the economic by forcing natural resources into the language of economics so they can be valued through the market system as a factor of production. The dollar becomes the unit of comparison: "Theoretically the methodology of [ecologic analysis] can be linked to that of [economic and regional science techniques], and this to the common unit, the dollar. ... Our basic procedure for linking the economic and ecologic systems is an extension of what is generally characterized as linear systems by applied mathematicians."²¹ This monetary conceptual "bridge" between nature and society is different both in form and content than other such bridges, such as comprehensive regional planning, or a

¹⁸see Friedmann and Weaver, 1979, for a vivid description of the transformation of regional planning from the 1920s to the postwar period.

¹⁹Isard, 1972: 50.

²⁰The question here is not as much what the mechanisms of the Input-Output table are as they translate from the economy to the environment, but rather what the object of the game, the driving mechanism. In I/O, it is to optimize the system, to remove bottlenecks to increase output and profits. The object of an ecologic I/O is more problematic.

²¹Isard, 1972: 94

spiritual notion of socio-ecological balance, or the procedural test of what is politically acceptable. For Isard, everything gets funnelled through this filter of linear models.

Natural resources therefore have no intrinsic value. They are also not fixed, but rather can be expanded and changed given technological changes (not individual resources, but rather resources as a group). In this way, they are socially defined and exploitable. Man defines what is a natural resource, what its value is, and when it is valuable and when not. Technology shapes natural resources, not the reverse.

In this regional scientific schema, the planner's traditionally rich sense of land and soil vanishes. There is neither the conservationist ideals of Teddy Roosevelt and Emerson, nor the anthropomorphic sense of power that hydroelectric dams, water projects and mechanized farm machinery gave to the TVA. The promethian transfer of economic power from the land into industrial society seemed complete, as land became socially-recreated in the image of ideal economic-space.

A Brief Detour: The Chicago School of Urban Ecology

The Chicago School of Urban Ecology represented an interesting mid-20th Century variation on this question of how different urbanists have seen the ecology-environment relationship. Though they were not directly involved in regional planning, their ideas did shape future urban economists and regional scientists.²² Robert Park, Roderick McKenzie, Ernest Burgess and Louis Wirth were the best known in this group of urbanists who used concepts from ecology to describe the social growth and differentiation of cities. Their use of the term "ecology" referred not as much to a balance in the natural environment, but rather to using the ecological model to examine the balance in the social (i.e., economic or built) environment. They borrowed from the natural sciences an interest in the form of ecologic inquiry, rather than a substantive interest in nature per se. They applied neo-Darwinian concepts of invasion, succession, competition, and division of labor to explain what they saw as the "natural" processes in the urban-industrial economy (analogous to such processes in the natural world of flora and fauna).

Just as these urbanists reinterpreted "ecology" as a social process, so too do they redefined the term "natural," which no longer referred to the world before and outside of urban-industrialization, but rather as the "unimpeded" functioning of the market economy. Thus the key force in the world, the "natural" force, shifted from that of the physical to the social. This was also a promethian thought (man freed from the constraints of God and nature), a positivistic sense of the inevitability of development. The role of planning was no longer to achieve an environmental-

²²It would be worthwhile to trace the impact of the Chicago School on the intellectual development of regional planning thought, and to compare their impact on the New Deal vs. postwar thought.

economic balance, let alone to protect the environment from the dangers of urbanization, but rather to guide this growing urban economy for its own sake.

4. *Conclusions and Future Speculations*

The regional perspective offers many advantages for dealing with the conflict between economic and environmental interests. Both its geographic scale and its comprehensive and interdisciplinary traditions create a middle ground for these two forces. However, there are numerous limitations: political (boundaries of cities, states, nations); physical (e.g., resources and pollution that cross bioregional boundaries); and economic (the rising global economy).

Even within regional planning, the field has dealt with this ecologic-economic conflict in very different ways over the past 60 years, from the holistic vision of the RPAA to the enlightened resource exploitation of the New Deal to the cool analysis of the regional scientists. None of these three have been wholly successful, suffering the trade-offs of idealistic purity, political-economic effectiveness, and analytical parsimony.

So, what role can regional planning play in the contemporary challenge to to achieve urban-industrial development without devastating the natural environment? Though I have taken but a speculative first step in addressing this question, these three past examples already offer some lessons. The TVA case illustrates that a regional approach does not guarantee this balance. Yet it does seem worth attempting to combine the regional idealism of the RPAA with the effectiveness of New Deal regional planning and the analytical power of regional science (with the latter freed of its more abstract positivistic assumptions and made more sensitive to non-market values of nature).

I must curb this idealism somewhat with the observation that an integrated, holistic planning is more easily imagined than achieved. It is naive to hope that we can soon train all planning students in sustainable development, so that each future planner has integrated the economic and the ecologic from within. In the short-term, we may need to continue to rely on the model of opposing advocates: the economists and the environmentalists each defend their own interests, and integration is achieved through the political process of compromise.²³ We must nonetheless hope that we can achieve a more holistic planning in the long-run.

Finally, I see the notion of "resources" as a very promising bridge between the economic and environmental worlds. After being almost indispensable in New Deal and wartime planning publications, the term seemed to have disappeared during most of post war regional analysis (with

²³These two alternatives are analogous to the older debate in planning between comprehensive and advocacy planning: that is, whether one planner can represent all sides fairly, or whether each planner must choose sides, with pluralism achieved through political battles. The pluralist model, however, may not be an option for many countries.

the exception of the 1960 publication of *Regions, Resources, and Economic Growth*).²⁴ The term "resources" allows for the exchange, use and innate values to be incorporated into one concept (e.g., the cost, uses, ecological role and beauty of precious California water). The return of "resource planning" to the center of planning language could be a modest but crucial step to get economic development planners and environmentalists to reintegrate their methods and priorities.

Bibliography

- Campbell, Scott. 1992. "From Dust Bowl to Defense Buildup: Labor Migration and Regional Development during the Second World War". *The Annals of Regional Science*. (forthcoming)
- Friedmann, John and Clyde Weaver. 1979. *Territory and Function: The Evolution of Regional Planning*. Berkeley and Los Angeles: University of California Press.
- Hansen, Alvin H. and Harvey S. Perloff. 1942. *Regional Resource Development*. Washington, D.C.: National Planning Association. (planning pamphlet No. 16)
- Hotelling, H. 1931. "The Economics of Exhaustible Resources," *Journal of Polit, Econ.*, April. Vol. 39. (pp. 137-175)
- Isard, Walter, with Charles L. Choguill, John Kissin, Richard H. Seyfarth and Richard Tatlock. 1972. *Ecologic-Economic Analysis for Regional Development*. New York: Free Press.
- Krueckeberg, Donald A. 1983. *The American Planner: Biographies and Recollections*. New York and London: Methuen.
- MacKaye, Benton. 1962. *The New Exploration: a Philosophy of Regional Planning*. Urbana: University of Illinois Press. (first published by Harcourt, Brace and Co., 1928)
- MacKaye, Benton. 1968. *From Geography to Geotechnics*. Urbana: University of Illinois Press. (edited by Paul T. Bryant)
- Perloff, Harvey, Edgar Dunn, Eric Lampart and Richard Muth. 1960. *Regions, Resources, and Economic Growth*. Baltimore: Johns Hopkins University Press.
- Smith, Sheldon and Ed Reeves (eds.). 1989. *Human Systems Ecology: Studies in the Integration of Political Economy, Adaptation, and Socionatural Regions*. Boulder and San Francisco: Westview Press.
- Solow, Robert M. "The Economics of Resources or the Resources of Economics," in Dorfman, Robert and Nancy S. Dorfman (eds.). 1977. *Economics of the Environment. Selected Readings*. New York: W.W. Norton. (second edition). (pp. 354 - 370)
- Sussman, Carl (ed). 1976. *Planning the Fourth Migration: The Neglected Vision of the Regional Planning Association of America*. Cambridge, Mass.: MIT Press.

²⁴Perloff et al, 1960.

UNIVERSITY OF ILLINOIS-URBANA



3 0112 079678295